

Curriculum Vitae

Mark G. Jackson

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Date of birth: July 12, 1977
Place of birth: Portland, Oregon, USA

Employment History

2004-present: Postdoctoral Researcher *Fermi National Accelerator Laboratory*
Supervisor: Scott Dodelson

Education

1999–2004: M.S. and Ph.D., Theoretical Physics *Columbia University*
Doctoral Thesis Title: “Brane Gas Cosmology in Superstring Theory”
Advisor: Brian R. Greene
1995–1999: B.S. with Honors, Physics and Math Majors *Duke University*
Senior Thesis Title: “Two Black Hole Holography, Lensing and Intensity”
Advisor: M. Ronen Plesser

Academic Achievements and Awards

2003:	KITP Graduate Fellow	<i>UC-Santa Barbara</i>
2002:	J. Selvaggi Award	<i>Columbia University</i>
2001 & 2002:	Pfister Fellowship	<i>Columbia University</i>
1999 & 2000:	GAANN Fellowship	<i>Department of Education</i>
1998:	National Undergraduate Fellowship	<i>Princeton University</i>
1996 & 1997:	Summer Undergraduate Research Fellowship	<i>California Institute of Technology</i>
1994:	Apprenticeships in Science and Engineering	<i>Oregon Graduate Institute</i>

Relevant Experience

2004–present Referee, Journal of Cosmology and Astroparticle Physics
2000–2004: Graduate Assistant in Research, Department of Physics, Columbia University
2000–2004: Teaching assistant for courses in *Modern Geometry* and *Topics in Particle Cosmology* (with Brian Greene) and *Quantum Mechanics* (with Dan Kabat)
2000–2002: VIGRE Summer Instructor, supervised advanced physics projects for 12 undergraduates (resulting in publication in JHEP)
1999 & 2000: Laboratory Instructor, Department of Physics, Columbia University
1999–2004: Extensive tutoring in undergraduate and high school physics
1998: Editor-in-chief, Duke University Journal of Science and Technology

Public Education and Outreach

- Lectures at NY Amateur Physics Society (4/04), Manhattanville College (4/04)
- Instructor, Fermilab Saturday Morning Physics Classes (10/04)
- Project Mentor, Illinois Math and Science Academy (2004)

Invited Talks

- “Brane Gas Cosmology,” Stanford Univ. (1/04), Fermilab (1/04), Univ. of Pennsylvania (2/04), BIRS (6/04), Univ. of Wisconsin-Madison (11/04)

References

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Publications

- R. Easter, B. R. Greene, M. G. Jackson and D. Kabat, “String Windings in the Early Universe,” [arXiv:hep-th/0409121].
- M. G. Jackson, N. T. Jones, and J. Polchinski, “Collisions of Cosmic F- and D-strings,” [arXiv:hep-th/0405229].
- R. Easter, B. R. Greene, M. G. Jackson and D. Kabat, “Brane gases in the early universe: Thermodynamics and cosmology,” *JCAP* **0401**, 006 (2004) [arXiv:hep-th/0307233].
- R. Easter, B. R. Greene, M. G. Jackson and D. Kabat, “Brane gas cosmology in M-theory: Late time behavior,” *Phys. Rev. D* **67**, 123501 (2003) [arXiv:hep-th/0211124].
- J. Conley, B. Geller, M. G. Jackson, L. Pomerance and S. Shrivastava, “A quantum mechanical model of spherical supermembranes,” *JHEP* **0301**, 070 (2003) [arXiv:hep-th/0210049].
- R. Easter, B. R. Greene and M. G. Jackson, “Cosmological string gas on orbifolds,” *Phys. Rev. D* **66**, 023502 (2002) [arXiv:hep-th/0204099].
- M. G. Jackson, “The stability of noncommutative scalar solitons,” *JHEP* **0109**, 004 (2001) [arXiv:hep-th/0103217].
- M. G. Jackson, “Two black hole holography, lensing and intensity,” *Phys. Rev. D* **64**, 044020 (2001) [arXiv:gr-qc/0103078].